

WEST AFRICA
SMALLPOX ERADICATION/MEASLES CONTROL PROGRAM

SURVEILLANCE REPORT NO. 4

- I. CURRENT SMALLPOX MORBIDITY
- II. DEMOGRAPHIC REPORT

Department of Health, Education, and Welfare
Public Health Service
Communicable Disease Center
Smallpox Eradication Program
Atlanta, Georgia 30333

October 15, 1966

Prepared by:
Statistics Unit
Smallpox Eradication Program

WEST AFRICA
SMALLPOX ERADICATION/MEASLES CONTROL PROGRAM

PERFORMANCE REPORT NO. 4

I. CURRENT SMALLPOX MORBIDITY
II. DEMOGRAPHIC REPORT

Department of Health, Education, and Welfare
Public Health Service
Communicable Disease Center
Smallpox Eradication Program
Atlanta, Georgia 30333

Prepared by:
Statistics Unit
Smallpox Eradication Program

October 15, 1966

I. CURRENT SMALLPOX MORBIDITY

According to notifications received by the World Health Organization through September 22, 1966, 6,156 cases of smallpox have been reported from the 19 countries participating in the West African Smallpox Eradication/Measles Control Program. This compares with 5,192 cases reported during a comparable time period in 1965, an increase of 18 percent. The numbers of cases reported by country are shown in Table I.

In Dahomey, Cotonou was added to the list of infected areas on August 16. Three cases of smallpox were reported from Cotonou during the week ending August 23. One other case occurred in early August.

During the week ending August 27, 30 cases were reported from Nigeria, including 23 from the Northern Provinces, 4 from the Mid-West and 3 from the Western Provinces. In addition, 11 delayed reports were received bringing the cumulative total in Nigeria to 4,485.

In Niger, Madaoua circumscription and Burni N'Konni circumscription were declared newly infected areas as of September 8, 1966. During the week ending September 8, 3 and 2 cases, respectively, were reported from these two areas. Dosso circumscription, Maine-Soroa circumscription (Gouré Cercle) and Niamey circumscription were removed from the infected area list during the week ending September 22.

Of 14 cases reported from Sierra Leone during the four-week period ending August 6, 5 cases, including 2 deaths, were from Freetown. Eight cases of smallpox have now been reported from Freetown in July and Freetown was declared a newly infected area as of July 9. The Northern Provinces were removed from the infected area list during the week ending September 15.

In Upper Volta, cases of smallpox were reported for the first time since April. Sixteen cases, including 1 death, were reported from the Cercle of Dori for the week ending August 17. This is the first report of smallpox in Dori in 1966.

Table I

Reported Smallpox Cases
in 19 West African Countries
1966*

Country	Most Recent Reporting Date in 1966	Cumulative No. of cases		Comments - 1966 Incidence
		1966	1965**	
Cameroon	April 30	3(r)	0(r)	2 cases reported from Division of Mayo-Danai and one case from Division of Margui-Wandala.
C.A.R.	***	0	0	
Chad	***	0	73(i)	
Congo (B)	April 3	2	63	
Dahomey	Aug. 23	305	156	77 cases reported from circumscription of Allada, Sud, Dép., between July 20 and August 9.
Gabon	***	0	1	
Gambia	March 15	3	1	3 cases from Upper River, Division.
Ghana	June 10	12(i,r)	6	
Guinea	Aug. 13	5	51	2 cases reported from Télimélé Region week ending August 13.
Ivory Coast	***	0	3	
Liberia	***	0	49	
Mali	Aug. 14	270	529	78 cases reported from Cercle of San, 72 from Cercle of Nioro, and 55 from Cercle of Dire.
Mauritania	Aug. 11	****	0	Smallpox reported present in Cercle of Hodh Occidental as of August 11.
Niger	Sept. 8	844	371	Over 130 cases reported from each of the Cercles of Niamey, Tillabery and Dosso.
Nigeria	Aug. 27	4483	3817	<u>Provinces</u> Northern 3986 Western 288 Mid-Western 108 Lagos(City) 87 Eastern 14
Senegal	***	0	0	
Sierra Leone	Aug. 6	113(i)	49	84 cases reported from Eastern Provinces.
Togo	Aug. 14	39	10	8 cases reported from Region des Plateaux in late May
Upper Volta	Aug. 17	67	13	40 cases reported from Cercle of Bobo-Dioulasso prior to May 1. 16 cases reported from Cercle of Dori week ending August 17.
	Total	6146	5192	

* Reports received by WHO through Sept. 22, 1966

** Comparable time period in 1965

*** No cases reported to WHO through Sept. 22, 1966

**** See comments - 1966 incidence

(i) Includes imported cases

(r) Revised

II. DEMOGRAPHIC REPORT

The tables presented in this section of the Surveillance Report represent the best data available to the Smallpox Eradication Program at the present time regarding population and vital statistics in the 19-country Regional area covered by the Program. Most of the demographic data has been issued by the Statistical Office of the United Nations and the source of data is shown at the bottom of each table. When information has been included from other sources, it is adequately footnoted.

In addition to population estimates and vital statistics that are currently available, population projections have been made for the years 1966 through 1971 (tables 2-4) based on 1965 mid-year population estimates and average annual rates of population increase published by the United Nations Statistical Office. These projections have been made by the Statistics Unit of the CDC Smallpox Eradication Program to provide guidelines for program planning in the field.

As population estimates are updated and new information becomes available regarding vital statistics and annual population increases, these tables will be revised. From all concerned in this program, we would appreciate receiving appropriate revisions, additions and corrections.

Table 1

Estimates of Mid-Year Population
West and West-Central Africa, 1965

Country	Population (000's)	Country	Population (000's)
1. Cameroon	5,210	11. Liberia	1,066
2. C. A. R.	1,352	12. Mali	4,576
3. Chad	3,350*	13. Mauritania	920*
4. Congo (B)	840*	14. Niger	3,328
5. Dahomey	2,365*	15. Nigeria	57,500*
6. Gabon	462	16. Senegal	3,490
7. Gambia	330	17. Sierra Leone	2,290*
8. Ghana	7,740	18. Togo	1,638
9. Guinea	3,500	19. Upper Volta	4,882
10. Ivory Coast	3,835*		

Footnotes:

1. Based on a series of sample surveys and partial censuses carried out in 1960-1964. Not comparable with previous estimates.
 2. African population only; unofficial government figures released March 14, 1966 estimates C.A.R. population to be 2,088,000 (Africa Report, May 1966).
 3. Based on sample survey conducted in 1964. (African population only). Not comparable with previous estimates.
 7. Based on census of April, 1963 (315,486); excludes 7,454 farming immigrants.
 11. Based on census of April, 1962 (1,016,443); 1965 estimate for April, 1965.
 12. Based on sample survey conducted in 1960; includes estimate of 209,000 for Nomad population and about 33,000 in Niger office zone not covered by survey.
 14. Based on 1959 Niamey census (30,030), sample survey conducted in 1959 outside of Niamey, and estimated 234,000 persons in area not covered by survey (African population only).
 15. Mid-year estimate based on census of November, 1963 (55,670,052).
 16. Mid-year estimate based on sample survey conducted in 1960-1961.
 17. Based on census of April, 1963, (2,180,354).
 19. Based on 1960-1961 sample survey of 226 villages, 12 urban centers, and estimate of 100,000 persons for towns of Ouagadougou and Bobo-Dioulasso.
- * Unofficial estimate prepared by the United Nations in the absence of official mid-year estimate.

Source of Data: United Nations Statistical Office: Quarterly Population and Vital Statistics Report; Series A/XVIII/3; July, 1966.

Table 2

Estimated Mid-Year Populations (Millions)
West and West Central Africa
1966 and 1967*

<u>Country</u>	<u>Estimated Population (Millions)</u>	
	<u>1966</u>	<u>1967</u>
Cameroon	5.3	5.4
C. A. Republic	1.4	1.4
Chad	3.4	3.5
Congo (B)	0.9	0.9
Dahomey	2.4	2.5
Gabon	0.5	0.5
Gambia	0.3	0.3
Ghana	8.0	8.2
Guinea	3.6	3.7
Ivory Coast	3.9	4.1
Liberia	1.1	1.1
Mali	4.7	4.8
Mauritania	0.9	1.0
Niger	3.5	3.6
Nigeria	58.6	59.8
Senegal	3.6	3.7
Sierra Leone	2.4	2.4
Togo	1.7	1.7
Upper Volta	<u>5.0</u>	<u>5.1</u>
Total	111.2	113.7

* See Table 3 for more detailed projections for years 1966 through 1971.

Table 3

West and West-Central Africa
Population Projections, 1966-71

Country	Estimated Population 1965 (Thousands)*	Average Annual Rate of Increase**		Estimated Mid-year Population (Thousands)					
		Years	%	1966	1967	1968	1969	1970	1971
Cameroon	5210	1963-64	1.9	5309	5410	5513	5618	5725	5834
C. A. R.	1352	1960-64	1.8	1376	1401	1426	1452	1478	1505
Chad	3352	***	1.7	3409	3467	3526	3586	3647	3709
Congo (B)	840	***	1.7	854	869	884	899	914	930
Dahomey	2365	1958-63	2.3	2419	2475	2532	2590	2650	2711
Gabon	462	1958-63	1.8	470	478	487	496	505	514
Gambia	330	1963-64	2.9	340	350	360	370	381	392
Ghana	7740	1960-64	2.8	7957	8180	8409	8644	8886	9135
Guinea	3500	1960-64	2.8	3598	3699	3803	3909	4018	4131
Ivory Coast	3835	1963-64	2.9	3946	4060	4178	4299	4424	4552
Liberia	1066	1962-64	1.2	1079	1092	1105	1118	1131	1145
Mali	4576	1960-64	2.4	4686	4798	4913	5031	5152	5276
Mauritania	920	****	2.8	946	972	999	1027	1056	1086
Niger	3328	1960-64	3.8	3454	3585	3721	3862	4009	4161
Nigeria	57500	*****	2.0	58650	59823	61019	62239	63484	64754
Senegal	3490	1960-64	2.4	3574	3660	3748	3838	3930	4024
Sierra Leone	2290	****	2.8	2354	2420	2488	2558	2630	2704
Togo	1638	1963-64	2.4	1677	1717	1758	1800	1843	1887
Upper Volta	4882	1960-64	2.6	5009	5139	5273	5410	5551	5695

* United Nations Statistical Office: Quarterly Population and Vital Statistics Report. Series A/XVIII/3; July, 1966.

** UN Demographic Yearbook, 1964.

*** Rate not computed because of apparent lack of comparability between 1964 sample survey results and estimates shown for previous years. Central Africa average annual increase of 1.7% (1960-63) used for projections

**** Rate not computed because of apparent lack of comparability between recent census results and estimates shown for previous years. West Africa average annual increase of 2.8% (1960-63) used for projections.

***** Rate not computed because of apparent lack of comparability between 1963 census results and estimates shown for previous years. Average annual increase of 2.0% from census in November 1963 to mid-year estimate for 1965 used for projections.

Table 4
Population Projections by Region*
Nigeria, 1964-1971

Year	Region (Population in Millions)					Total***
	Northern	Eastern	Western	Mid-West	Lagos	
1963**	29.8	12.4	10.3	2.5	0.7	55.7
1964	30.2	12.6	10.4	2.5	0.7	56.4
1965	30.8	12.9	10.6	2.6	0.7	57.5
1966	31.4	13.1	10.8	2.6	0.7	58.6
1967	32.0	13.4	11.0	2.7	0.7	59.8
1968	32.7	13.6	11.3	2.7	0.8	61.0
1969	33.3	13.9	11.5	2.8	0.8	62.2
1970	34.1	14.2	11.7	2.8	0.8	63.5
1971	34.8	14.5	11.9	2.9	0.8	64.8

* See Table 3; Average annual increase of 2.0% used for projections.

** Census of November, 1963.

*** Regional estimates may not add up to total due to rounding of figures.

Table 5

Population of Capital Cities and
Cities of 100,000 or More Inhabitants
West and West Central Africa, Latest Available Year

Country	City	Date	Population		Source of Population Data
			City Limits	Urban Area	
Cameroon	Douala	1964	---	187,000*	Estimate
	Yaounde	1962	93,269	---	Municipal Census
C. A. R.	Bangui	1964	111,266(1)	---	Municipal Census
Chad	Fort Lamy	1963	---	91,700	Estimate
Congo (B)	Brazzaville	1961	---	133,700	Municipal Census
Dahomey	Cotonou	1964	109,328*	---	Municipal Census
	Porto-Novo	1964	69,500	---	Estimate
Gabon	Libreville	1961	---	31,027	Sample Survey
Gambia	Bathurst	1964	28,896	---	Estimate
Ghana	Accra	1960	337,828	388,396(2)	National Census
	Kumasi	1960	180,642	218,172(2)	National Census
	Sekondi- Takoradi	1960	75,450(3)	123,313(2)	National Census
Guinea	Conakry	1960	43,000*	112,158(4)	Municipal Census
Ivory Coast	Abidjan	1960	---	180,000	Estimate
Liberia	Monrovia	1962	80,992*	---	National Census
Mali	Bamako	1960	---	131,900(5)*	Sample Survey
Mauritania	Nouakchott	1964	12,500	---	Estimate
Niger	Niamey	1962	40,000	---	Estimate
Nigeria	Aba	1963	131,003	---	National Census
	Abeokuta	1963	187,292	---	National Census
	Ado	1963	157,519	---	National Census
	Benin	1963	100,694	---	National Census
	Ede	1963	134,550	---	National Census
	Enugu	1963	138,457	---	National Census
	Ibadan	1963	627,379	---	National Census
	Ife	1963	130,050	---	National Census
	Ikere	1963	107,216	---	National Census
	Ilesha	1963	165,822	---	National Census
	Ilorin	1963	208,546	---	National Census
	Iwo	1963	158,583	---	National Census
	Kaduna	1963	149,910	---	National Census
	Kano	1963	295,432	---	National Census
	Lagos	1963	665,246	---	National Census
	Maiduguri	1963	139,965	---	National Census
	Mushin	1963	189,755	---	National Census
	Ogbomosho	1963	319,881	---	National Census
	Onitsha	1963	163,032	---	National Census
	Oshogbo	1963	210,384	---	National Census
	Oyo	1963	112,349	---	National Census
	Port Harcourt	1963	179,563	---	National Census
	Zaria	1963	166,170	---	National Census

Table 5 (Continued)

<u>Country</u>	<u>City</u>	<u>Date</u>	<u>Population</u>		<u>Source of Population Data</u>
			<u>City Limits</u>	<u>Urban Area</u>	
Senegal	Dakar	1961	---	374,700(6)	Sample Survey
Sierra Leone	Freetown	1963	127,917	---	Census
Togo	Lome	1962	80,000	90,000	Estimate
Upper Volta	Ouagadougou	1961	59,126	---	Municipal Census

Footnotes:

* Provisional

- (1) Unofficial government figures released March 14, 1966 estimates population of Bangui to be 237,971 (Africa Report, May, 1966).
- (2) For "city councils"; includes some rural areas
- (3) Comprises Sekondi (34,513) and Takoradi (40,937)
- (4) Comprises city proper, suburbs, and Iles de Loos
- (5) African population only
- (6) For commune of Dakar, comprising city proper, the suburban villages and Goree.

Source of Data: UN Demographic Yearbook, 1964; Table 7

Table 6

Vital Statistics and Estimated Number of Newborns
West and West-Central Africa, 1966

Country	Latest Available Data (Year)	Estimated Population (1966)*	Crude Birth Rate**	Estimated Number of Newborns*	Infant Mortality Rate***	Estimated Number of Infants Deaths*
Cameroon ¹	1964-65	5309	50	265	138	37
C. A. R. ²	1959-60	1376	48	66	190	13
Chad	1963-64	3409	46	157	165	26
Congo (B)	1960-61	854	41	35	180	6
Dahomey	1961	2419	54	131	110	14
Gabon	1960-61	470	35	16	229	4
Gambia ³	1965	340	48	16	71	1
Ghana	1960	7957	50	398	156	62
Guinea	1955	3598	62	223	216	48
Ivory Coast ⁴	1961	3946	56	221	...	...
Liberia	...	1079	...	...	...	...
Mali	1960-61	4686	61	286	123	35
Mauritania ⁵	1961-62	946	47	44	...	...
Niger	1959-60	3454	52	180	200	36
Nigeria	1952-53	58650	55	3226	...	...
Senegal	1960-61	3574	43	154	93	14
Sierra Leone ⁶	1963	2354	52	122	105	13
Togo	1961	1677	55	92	127	12
Upper Volta	1960-61	5009	50	250	182	46

Footnotes:

... No data available

* In thousands i.e., in Cameroon, 5,309,000 population, 265,000 newborns, 3700 infant deaths.

** Per 1,000 persons.

*** Deaths under one year of age per 1,000 live births.

1. Vital statistics based on estimated annual average for African population in West Cameroon.

2. Vital statistics based on data available for approximately 85% of total population covered by survey.

3. Estimates based on Vital Statistics reported for Bathurst by Ministry of Health.

4. Vital statistics are estimates, basis unknown.

5. Vital statistics based on estimated annual average for 27 urban centers.

6. Estimates based on Vital Statistics reported for Freetown by Ministry of Health.

Source of Vital Statistics: United Nations Statistical Office: Quarterly Population and Vital Statistics Report, Series A/XVIII/3; July 1966.

Table 7

Vital Statistics For
Lagos (1957-1964) and Katsina Province (1960, 1963-64)
Nigeria*

Vital Statistics	Lagos								Katsina Province		
	1957	1958	1959	1960	1961	1962	1963	1964	1960	1963	1964
Birth Rate**	49.2	50.4	55.8	60.2	60.3	66.7	49.0	52.6	32.9	24.7	25.9
Death Rate**	14.2	12.7	13.6	11.7	13.4	10.9	8.6	8.2	12.9	9.4	10.8
Infant Mortality Rate***	80.1	79.9	77.0	62.9	81.0	62.0	67.8	58.3	72.0	NA	NA
Maternal Mortality Rate***	3.5	5.5	4.7	3.5	NA	NA	2.8	2.3	6.7	NA	NA

* Only in Lagos Federal Territory and In Katsina Province, Northern Region, is the registration of births and deaths comprehensive and compulsory by law.

** Per 1000 population; In Lagos, data tabulated by year of registration rather than occurrence.

*** Per 1000 live births

NA: Not Available

Source of Data: 1957-60: WHO Second Report on the World Health Situation: p. 80-82, Geneva.

1961-62: UN Demographic Yearbook, 1964

1963-64: (Katsina Province) Northern Nigeria Ministry of Health Annual Report. 1963-64; Kaduna.

1963-64: (Lagos) Federal Ministry of Health.

Table 1

Annual Statistics for
Lagos (1957-1966) and Western Province (1957-1966)
Nigeria

Vital Statistics	Years									
	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Birth rate	48.3	50.1	52.7	50.7	50.8	50.8	50.8	50.8	50.8	50.8
Death rate	19.2	17.7	18.8	17.7	17.8	17.8	17.8	17.8	17.8	17.8
Infant mortality	40.1	38.9	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
Sex ratio	100	100	100	100	100	100	100	100	100	100

The above figures are based on the 1957-1966 Annual Statistics for Lagos and Western Province, Nigeria. The birth rate is the number of live births per 1,000 population per year. The death rate is the number of deaths per 1,000 population per year. The infant mortality rate is the number of deaths of infants under the age of five per 1,000 live births. The sex ratio is the number of males per 100 females.

Source of data: 1957-1966 Annual Statistics for Lagos and Western Province, Nigeria. The data were obtained from the Lagos State Government and the Western Province Government. The data were compiled by the Lagos State Government and the Western Province Government.